**GATITU MIXED SECONDARY SCHOOL**

**PHYSICS FORM 1 MID TERM EXAM TERM 2 2015**

1. Define physics. 1mk
2. Give five first Aid measures. 5mks
3. Complete the table below. 7mks

|  |  |  |
| --- | --- | --- |
| Basic physical quantities | SI units | Symbol of units |
| Length |  |  |
| Mass |  |  |
| Time |  |  |
| Electric current |  |  |
| Thermodynamic temperature |  |  |
| Luminous intensity |  |  |
| Amount of substance |  |  |

1. Charo found that the perimeter of his farming plot was approximately 200 strides. His stride was 0.9 m long. What was the perimeter of the plot? 3mks
2. A metallic rod has a length of 180 cm. The length of its shadow was 116 cm. a student wanted to know the length of a tree and therefore he measured the length of the shadow of the tree and found it to be 840 cm. calculate the height of the tree. 4mks
3. The diameter of the capillary tube is 1.0mm. calculate the cross section area of the bore in cm2. Take (II = 3.142) 3mks
4. The water level in a burette is at the 2.0 cm3 mark. 10 drops each of volume 0.01 cm3 are let out. Find the new burette reading. 3mks
5. An empty density bottle has a mass of 25 g. its mass is 50g when full of water and 45g when full of another liquid. What is the density of the liquid in kgm-3? 4mks
6. 200cm3 of fresh water of density 1000kgm-3 is mixed with 2400 cm3 of sea water of density 1025kgm-3. Calculate the density of mixture. 4mks
7. A length 550cm of thin thread wraps around a cylinder exactly 25 times. Calculate the circumference and the radius of the cylinder.(take II=22/7) 4mks
8. Define force and give its SI unit. 2mks
9. List in detail the effect of force on objects. 4mks
10. List and explain three types of force. 6mks
11. The figure shows the shapes of drops of water and mercury placed on the surface of a clean glass plate. Explain the difference in the shapes. 3mks



Explain the difference in shapes. 3mks

1. A body weighs 200N in air and 80N when submerged in water. Calculate the up thrust acting on the body. 2mks
2. Define surface tension and state the factors affecting surface tension and explain. 3mks
3. Differentiate between scalar and vector quantities and give two examples of each. 4mks
4. Calculate the resultant vector of the figure below. 2mks



1. Define pressure and give its SI units. 2mks
2. The figure below show a brick.



Determine the

1. Greatest pressure that can be exerted by the brick on a flat surface. 2mks
2. The least pressure that can be exerted by the brick on a flat surface. 2mks
3. State two factors affecting pressure. 2mks
4. State the Pascal’s principal of pressure. 10mks